

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

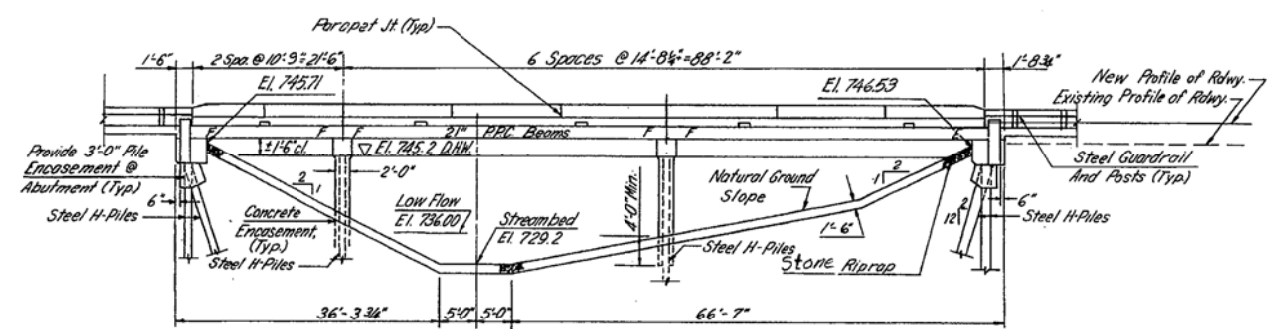
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
S.B.I. 27	4BR-2	CARROLL	18	11	SHEETS 8
F.A. 17					
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

Benchmark: Chiseled \square on NW wingwall Sta. 104+35.4 El. 747.08
Existing Structure: S.M. 008-0003 built as S.B.I. Route 27 Section 4B in 1929 @ Sta. 104+65.60 R.C.D.G. Bridge, back to back of abutments 63'-0", out to out width of Structure 24'-3". Existing Structure to be removed to Elevations 2'-0" below proposed ground Elevations. Where potential conflict exists, existing structure and piles shall be exposed and removed as necessary to drive new piles.

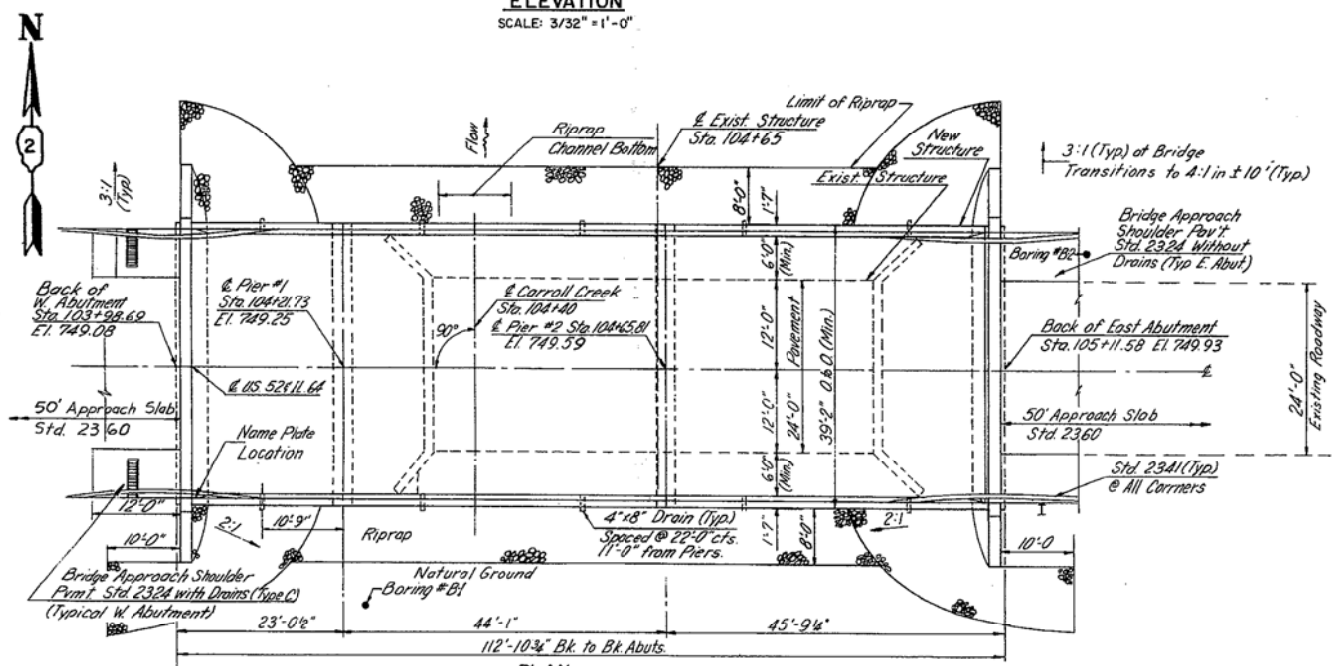
STATION 104+40.00
REBUILT 1982 BY
STATE OF ILLINOIS
F.A. RT. 17 SEC. 4BR-2
F.A. PROJ. BR-F-17(63)
LOADING HS20
STR. NO.

GENERAL NOTES

See Proposal for Boring Data
Reinforcement bars shall conform to the requirements of ASTM A-36 or A-572, Grade 60 unless otherwise noted.
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.
A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.
Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.
All structural steel shall be shop painted with two coats of basic lead silico chromate paint.
Existing east abutment shall be removed to $\pm 2'-0"$ below finished rip rap grade.
Protective coat shall not be applied to surfaces to which waterproofing Membrane System is to be applied. Protective coat shall be applied to the top and inside surfaces of all concrete parapets.



ELEVATION
SCALE: 3/32" = 1'-0"



PLAN
SCALE: 3/32" = 1'-0"

WATERWAY INFORMATION
Drainage Area 42 Sq. Mi. Low Grade Elev 747.32 @ Sta 101+18.90

Flood Yr.	Freq.	Q	CF.S.	Exist. Prop.	Opening Sq. Ft.	Not. H.W.E.	Head. FF. Exist.	Head. FF. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	4780	405	733	745.2	2.4	0.46	747.6	745.66	745.66
Base	100	5465	405	786	745.6	2.06	0.58	747.86	746.18	746.18
Overtopping										
Max. Calc.	500	7045	405	900	746.5		0.87		747.37	747.37

DESIGNED	R.A.R.
CHECKED	G.S.P.
DRAWN	P.V.
CHECKED	R.A.R. G.S.P.

GRADE PROFILE
F.A. 17 (S.B.I. 27)
(AT & ROADWAY)

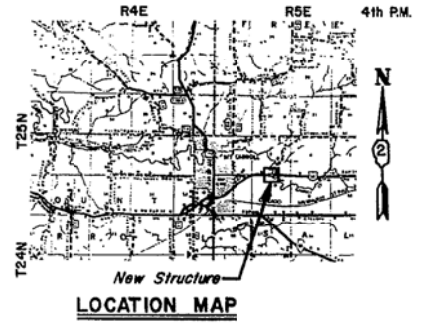
DESIGN SPECIFICATIONS
—A.A.S.H.T.O. 1977 Standard Specifications for Highway Bridges and 1978, 1979, 1980, and 1981 Interims
—Standard Specifications for Road and Bridge Construction, State of Illinois (Adopted Oct. 1, 1979)

DESIGN CRITERIA
Loading HS 20-44
Allow 254/sq. ft. Future Wearing Surface

DESIGN STRESS
Prestressed Deck Beams
Concrete
f'c = 5,000 psi
f'ci = 4,000 psi
Steel Tendons
f's = 270,000 psi
f'si = 189,000 psi
Intermediate Reinforcement
fy = 60,000 psi
Concrete, Cast in Place
f'c = 3,500 psi
fy = 60,000 psi unless otherwise noted.

TOTAL BILL OF MATERIAL

Item	Unit	Super.	Sub.	Total
Structure Excavation	Cu. Yd.		133	133
Bituminous Concrete Surface Course, Class I (Mixture D)	Ton	67		67
Removal of Existing Structures	Lump Sum			1
Class X Concrete	Cu. Yd.	24.9	154.6	179.5
Precast Prestressed Concrete Deck Beams (21 Inch Depth)	Sq. Ft.	4270.5		4270.5
Reinforcement Bars	Pound	1750	11760	13510
Reinforcement Bars (Epoxy Coated)	Pound		1980	1980
Steel Piles, HP12 X 53	Lin. Ft.		1124	1124
Temporary Sheet Piling	Sq. Ft.		1872	1872
Name Plates	Each			1
Stone Rip Rap	Sq. Yd.		691	691
Temporary Bridge Rail	Lin. Ft.			173
Portland Cement Mortar Pairing Course	Lin. Ft.	1392		1392
Waterproofing Membrane System	Sq. Yd.	442.7		442.7
Preformed Joint Seal (4")	Lin. Ft.	41		41
Structural Steel	Pound		2470	2470
Protective Coat	Sq. Yd.		93.6	93.6



GENERAL PLAN AND ELEVATION
F.A. 17 (S.B.I. ROUTE 27) SEC. 4BR-2
CARROLL COUNTY
STA. 104+40
SCALE: AS NOTED
DATE: 4/30/82
SCHUMACHER AND SVOBODA, INC.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

REVISIONS	
DATE	DESCRIPTION

FILE NAME = ... \0264083-SHT-Ex-Bridge.dgn

USER NAME = SAW	DESIGNED - RAC	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - LCR	REVISED -
PLOT DATE = 6/27/2013	CHECKED - DAZ	REVISED -
	DATE - 06-28-13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ZROKA
engineering
Zzoka Engineering, P.C.
4216 North Hermitage
Chicago, IL 60613

EXISTING BRIDGE PLANS - 1933
FOR INFORMATION ONLY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17	4BR-5 & 4BR-6	CARROLL	150	97
CONTRACT NO. 64DB3				
ILLINOIS FED. AID PROJECT				